

## REMARKS

In the Office Action dated February 19, 2010, the Examiner has rejected Claims 42-44, 46-54, 56 and 57 under 35 U.S.C. §102(b) as anticipated by, or in the alternative, under 35 U.S.C. §103(a) as obvious over EP 0447359 to Wong, et al. (hereinafter "Wong, et al."), JP 7067536 (hereinafter "JP '536") and U.S. Patent No. 5,525,360 to Yotka, et al. (hereinafter "Yotka, et al").

Wong, et al. is alleged to teach a synergistic sweetening composition comprising polydextrose, monosaccharides and disaccharides. JP '536 purports to teach polydextrose and sugar. Yotka, et al. is cited allegedly for teaching a combination of polydextrose and sugars including sucrose and maltose.

Claims 58-63 have been rejected under 35 U.S.C. §103(a) as obvious over Wong, et al., JP, '536 and Yotka, et al. The Examiner alleges that it would have been obvious to the skilled artisan at the time of the present invention to use polydextrose and sugar compositions as taught by the cited art in various food products.

In the first instance, Applicant, through the undersigned, thanks Examiner Wong for the courtesy extended by way of a telephone interview conducted April 28, 2010.

In response to the outstanding rejections, Applicant has cancelled Claim 42 without prejudice and added new Claims 64 and 65 (amending the dependencies appropriately). No new matter has been introduced. Claims 64 and 65 are directed to a method of enhancing the sweetness of an edible sugar containing product by the addition of polydextrose in an amount sufficient to synergistically enhance the sweetness of the sugar in the absence of an intense sweetener. Claims 64 and 65 are specifically directed to compositions which DO NOT include an intense sweetener.

Notably, in this regard, the Examiner asserts at page 5 of the pending Office Action that "the claims do not exclude the use of an intense sweetener". The present claims do so.

Support for the newly added claims (64 and 65) appears within the specification as originally filed at, for example, page 10, last paragraph, and generally throughout the application. Indeed, one skilled in the art readily appreciates that the thrust of the present invention, reflected in the whole of the specification, is the surprising finding that the addition of polydextrose alone

can provide a synergistically improved sweetness to sugar compositions independent of, i.e., in the absence of, intense sweeteners.

Specifically, in this regard, the application as filed states at page 10, last paragraph:

"The edible product may also contain other sweetening agents but it should be noted that the inventive synergistic sweetening effect is obtained with polydextrose independently of the presence or absence of intense sweeteners in this product." (Emphasis supplied.)

Moreover, Examples 1-3 of the application specifically demonstrate the synergistic effect of the addition of polydextrose in the absence of any intense sweetener. Accordingly, the claims drawn to synergistically enhancing the sweetness of sugar compositions with polydextrose in the absence of intense sweeteners are clearly supported by the specification in a manner which complies with the written description requirement under 35 U.S.C. §112, first paragraph. *In re Edwards*, 568 F.2d 1349, 196 U.S.P.Q. 465 (CCPA 1978)

In respect to the cited prior art, Wong et al. teach a combination of polydextrose and a very specific artificial sweetener, i.e. 1-chloro-1'-deoxysucrose, which is a synthetic compound closely related to the well-known intense sweetener sucralose. Sucralose has an inherent sweetness which is about 600 times as high as that of sucrose. This compound is an intense sweetener.

Wong et al. observe at page 3, lines 35 to 36, that each intense sweetener is chemically distinct and that each sweetener presents a different challenge in respect to its use. There is no suggestion in Wong et al. that polydextrose has any effect on the sweetness of sucrose, or on the sweetness of any other sugar, i.e., any non-intense sweetener. To the contrary, Wong et al. teach at page 2, lines 42 to 43, that because polydextrose is not sweet, intense sweeteners must be used with polydextrose. Wong et al. does NOT exclude the need of an intense sweetener as does the sweetening method in accordance with the present invention. Wong, et al. teach polydextrose and an intense sweetener, i.e., 1-chloro-1'-deoxysucrose, an artificial sweetener.

The claimed method of the present invention excludes any intense sweetener from the sweetening composition, as the synergistic sweetening enhancement is accomplished by the addition of polydextrose to the conventional sugar compound. This effect is demonstrated by Examples 1-3 of the application as filed. As such, the present invention is distinguished from the

disclosure of Wong et al. which clearly requires the addition of an intense sweetener to achieve its sweetening effect.

The abstract of JP '536 discloses that a hard candy having a shape-retaining property can be provided by mixing 15-80 wt % of polydextrose with 20 to 85 % of a sugar or sugar alcohol. The whole of the disclosure of JP '536 publication relates to the shape-retaining characteristic of the product. There is neither teaching in this disclosure nor any suggestion of synergistically enhancing the sweetness of the sugar or sugar alcohol by polydextrose.

In this regard, it is well settled that in making out a *prima facie* case of anticipation, each and every element of the claimed invention must be found in a single prior art reference. *In re King*, 231 USPQ 136, 138 (Fed. Cir. 1986). Since the cited references do not evidence adding polydextrose in an amount sufficient to synergistically enhance the sweetness of edible sugar compositions particularly in the absence of an intense sweetener, the prior art fails to support a rejection under 35 U.S.C. §102(b). *In re King*, at 138 and *Catalina Marketing International, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 809-810, 62 U.S.P.Q.2d 1781, 1786 (Fed. Cir. 2002). (Principles of inherency do not prohibit a process patent for a new use of an old composition).

As seen, for example, at page 10 of the subject specification and in the examples of the present application, this synergistic effect has been observed in edible products such as milk products and fruit jams, where the polydextrose has surprisingly enhanced the sugar naturally present in the edible product, i.e., lactose in milk and fructose in fruit. It is respectfully submitted that the JP '536 publication can not anticipate the present claims which are drawn to adding polydextrose in an amount sufficient to synergistically increase the sweetness of the sugar. *In re Robertson* 169 F.3d 743, 745, 49 U.S.P.Q.2d 1949, 1950-1951 (Fed. Cir. 1999) and *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295, 63 U.S.P.Q.2d 1597, 1599 (Fed. Cir. 2002).

Moreover, the advantageous effect of polydextrose on sugars in edible products is wholly unrecognized in any of the cited art. Notably, the synergistic effect makes it possible to reduce the amount of sugar in the edible product in issue. Reducing the sugar level is a priority of the food industry both for dietetic purposes and for the ever-increasing obesity problem in the industrialized world.

Further, since the JP '536 publication fails to evidence any recognition of the claimed invention, the reference cannot support an obviousness rejection under 35 U.S.C. §103(a). *In re Naber*, 494 F.2d 1405, 1407, 181 U.S.P.Q. 639, 641 (CCPA 1974).

Yatka et al. use polydextrose as a non-sweet bulking agent to replace other “bulk sweeteners” in a chewing gum. At column 3, lines 61-64, Yatka et al. disclose that when polydextrose is used to replace sucrose and syrup, the combination actually results in a lower sweetness of the product, which calls for the use of intense sweeteners such as aspartame. Thus, Yatka et al. actually teaches away from the instant invention, which is based on the surprising observation that polydextrose, in fact, increases the sweetness of sucrose. It would therefore be impossible to obtain the method of the present invention when considering the teachings of Yatka et al., either alone or in combination with the other cited references. *In re King*, 231 USPQ 136, 138 (Fed. Cir. 1986).

Accordingly, the Examiner's rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) as applied to the pending claims have been overcome. The cited prior art neither anticipates nor renders obvious, singly or in combination, the presently claimed invention. Therefore, withdrawal of the Examiner's rejections under 35 U.S.C. §102(b) and §103(a) are respectively requested.

Thus, the present claims are deemed to be in condition for allowance which action is earnestly solicited.

Respectfully submitted,



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